

CLAIMS

1. Genes which code for glycosyl hydrolases having an HCA score with the
iota-carrageenase of *Alteromonas fortis* which is greater than or equal to 65% over
5 the domain extending between amino acids 164 and 311 of the protein sequence
SEQ ID No. 2 of said iota-carrageenase.
2. Genes according to claim 1 wherein the HCA score is greater than or equal
to 70%.
3. Genes according to claim 1 wherein the HCA score is greater than or equal
10 to 75%.
4. Gene according to claim 1 which codes for the ι -carrageenase of
Alteromonas fortis and comprises the nucleic acid sequence SEQ ID No. 1.
5. Genes which code for glycosyl hydrolases having an HCA score with the
kappa-carrageenase of *Alteromonas carrageenovora* which is greater than or equal
15 to 75% over the domain extending between amino acids 117 and 262 of the protein
sequence SEQ ID No. 6 of said kappa-carrageenase.
6. Genes according to claim 5 wherein the HCA score is greater than or equal
to 80%.
7. Genes according to claim 5 wherein the HCA score is greater than or equal
20 to 85%.
8. Gene according to claim 5 which codes for the κ -carrageenase of
Cytophaga drobachiensis and comprises the nucleic acid sequence SEQ ID No. 7.
9. Use of the genes according to any one of claims 1 to 8 for obtaining
glycosyl hydrolases by genetic engineering.
- 25 10. Use of the gene according to claim 4 for obtaining the iota-carrageenase of
Alteromonas fortis by genetic engineering.
11. Use of the gene according to claim 8 for obtaining the kappa-carrageenase
of *Cytophaga drobachiensis* by genetic engineering.